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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/825,243  
Filing Date: April 16, 2004  
Appellant(s): MARTINOT ET AL.

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Marina V. Zalevsky  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 07/29/2010 appealing from the Office action mailed 02/23/2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-8, 16-18, 20-25 and 27-29 are pending and stand rejected.

Claims 9-15 are pending and objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

6,600,735	Iwama et al.	3-1999
2002/0194316	Gous et al.	6-2002
5,381,403	Maher et al.	4-1993
2003/0123446	Muirhead et al.	12-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 16-18, 20-22, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. (US Patent No. 6,600,735) in view of Gous et al. (US Patent Publication No. 2002/0194316).

**Regarding claim1,** (Currently Amended): Iwama et al. a device (Fig. 1, element 103) for managing the measurement of parameters of end-to-end type data streams (In Fig. 1, element 103 perform a bandwidth controlling function which is based on some sort of bandwidth measurement) in a communication network (Fig. 1, Network 110) composed of at least two domains coupled together (Fig. 1, Zone 1 and Zone 2), and each equipped with a measuring appliance (Fig. 1, element 102 and also, Fig. 8, element 102 and sub-element 1705 which controls the bandwidth) to deliver local measurements representing parameter values of local end-to-end data streams (Abstract discloses the communication bandwidth which is managed by using element 103, gateway device and routers, which gateway's function is like a router), which said measuring appliances implement various measuring processes (Fig. 1, element 102

and also, Fig. 8, element 102 and sub-element 1705 which controls the bandwidth), but fail to teach a device comprising:

monitoring means for ordering constitution of a specific measurement configuration in each measuring appliance as a function of at least a corresponding measuring process of a respective measuring appliance and overall measurement specifications, and

calculation means for determining first data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances. However, Gous et al. teach a device characterized in that it includes

monitoring means for ordering constitution of a specific measurement configuration in each measuring appliance as a function of at least a corresponding measuring process of a respective measuring appliance and overall measurement specifications (Fig. 1, element 30 which perform the bandwidth allocation function. To explain more, see paragraph [0041] that discloses the changeover sequence creation module 30, having constructed the changeover sequence data structure 34 as constituting a collection of routing/admission data structures 36, will calculate a bandwidth allocation matrix for each routing/admission data structure 36 that is utilized in the changeover sequence generation process), and

calculation means for determining first data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances (Fig. 1, element 32 and also paragraph [0035],

discloses the changeover signaling module 32 operates to convert -calculate- the changeover sequence into a list of instructions -data representative - that are communicated to sets of nodes -End to End - of the network 12. Specifically, for each configuration specification within the changeover sequence, a respective instruction (or sets of instructions) may be sent to an appropriate node (or set of nodes) that are to be reconfigured in accordance with relevant configuration specification. The changeover signaling module 32 also receives acknowledgments from the nodes of the network 12 that the relevant nodes have successfully executed the received instructions. Also see Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 2, (currently amended):**Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means (Fig. 1, element 30 of Gous et al. which perform the bandwidth allocation function) is arranged to order the constitution of the specific measurement configuration in each measuring appliance as a function of the corresponding measuring process (claim 18 of Gous et al. ), second data representing an arrangement of the respective associated domain and overall measurement specifications (claim 1 of Iwama et al. discloses the information provided to Bandwidth Controller regarding some elements of each zone, first and second) which

describe the measurement parameters of the overall end-to-end data streams (Figs. 3-5 of Gous, disclose the end-to-end communication data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the precision in communication between two parties.

**Regarding claim 3,** (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means includes an interface means for defining said overall measurement specifications (On Fig. 1 of Gous et al., element between elements 30 and 32) which describe the measurement parameters of the overall end-to-end data streams (Figs. 3-5 of Gous, disclose the end-to-end communication data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 4,** (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein said monitoring means (Fig. 1 of Gous et al., element 30) includes:

configuration means for determining a configuration data for each measuring appliance (Figs. 1 and 5 of Gous et al., element 56), including determining local specifications of measurement parameters, and defining the specific measurement



configuration of each measuring appliance based on the determined local measurement specifications (Figs. 1 and 5 of Gous et al., element 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 5, (currently amended):** Iwama et al. in view of Gous et al. teach the device as in claim 4, wherein said configuration means is arranged to further determine the configuration data by determining data representing a correspondence between said determined local measurement specifications and said overall measurement specifications (Figs. 1 and 5 of Gous et al., element 56) which describe the measurement parameters of the overall end-to-end data streams (Figs. 3-5 of Gous, disclose the end-to-end communication data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 6, (currently amended):** Iwama et al. in view of Gous et al. teach the device as in claim 5, further including:

a first memory which stores data representing said overall measurement specifications (Fig. 1 of Gous et al., element 26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 7**, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 6, further including:

a second memory which stores data representing at least one of said local measurement specifications and said configuration data (Fig. 1 of Gous et al., element 28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 8**, (currently amended): Iwama et al. in view of Gous et al. teach the device as in claim 7, wherein at least one domain includes a measuring appliance which implements the measuring process based on a measurement model of a respective domain and local end-to-end data streams traversing the respective domain (Fig. 1 of Iwama et al. discloses the nodes in each zone within internet 110), the device further including:

a third memory which stores data representing said measurement model (Fig. 1 of Gous et al., element 56 is a table which is saved in a memory).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 16,** Iwama et al. in view of Gous et al. teach the device as in claim 4, Gous et al. further discloses the device wherein said calculation means includes an auxiliary calculation module arranged to determine second data representing the respective contributions of the coupled domains to the first data, from the local measurements delivered by said configured measuring appliances and said local measurement specifications (Fig. 2 of Gous et al. and also paragraphs [0040] and [0041] of Gous et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 17,** Iwama et al. in view of Gous et al. teach the device as in claim 16, Gous et al. further discloses the device wherein said auxiliary calculation module determines the second data representing at least one of relative contributions or absolute contributions (Fig. 2 of Gous et al. and also paragraphs [0040] and [0041] of Gous et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements

disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 18**, (currently amended) Iwama et al. in view of Gous et al. teach the device as in claim 16, Gous et al. further discloses the device further including:

a memory which stores at least one of said first or second data (Fig. 1 of Gous et al. element 24 is the storage unit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Claim 19, (canceled).**

**Regarding claim 20**, Iwama et al. in view of Gous et al. teach the device as in claim 16, Gous et al. further discloses the device further including:

an output interface coupled to said calculation means to deliver at least one of said first or second data at an output when so ordered (Fig. 1 of Gous et al. the connection between element 30 and element 32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 21**, (currently amended) Iwama et al. in view of Gous et al. teach the device or arrangement as in claim 18, Gous et al. further discloses the device further including:

an output interface to extract at least one of the said first or second data from the memory at an output when ordered to do so (Paragraph [0031] of Gous discloses the connection between the storage unit and the rest of the elements).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 22**, Iwama et al. in view of Gous et al. teach the device as in claim 20, Gous et al. further discloses the device further including:

a management information database to receive at least one of the first or the second data from said output interface (Fig. 1 of Gous et al. element 24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Regarding claim 25**, Iwama et al. in view of Gous et al. teach a communication network which includes at least two domains coupled together and each including a measuring appliance to deliver corresponding local measurements representing the parameters values of the local end-to-end data streams (Fig. 1 of Iwama et al. ), Gous

et al. further discloses the device wherein said measuring appliances implement different measuring processes, and further including at least one managing management device of claim 1 (Fig. 1 of Iwama et al. element 103 is the central managing device. Also each zone has its own measuring device).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements disclosed by Gous et al. in order to increase the quality of communication between two parties.

**Claim 26**, (canceled).

**Regarding claim 28**, Iwama et al. in view of Gous et al. teach the device as in claim 1, wherein the measuring appliances (Fig. 1, element 102 which can be a router as well) comprise:

a first measuring appliance associated with a first network domain and executing a first measuring process to collect the local measurements of a first local end-to-end data stream which traverses the first network domain (Fig. 8, element 1705, also for more explanation, column 13, lines 1-14, Iwama et al., discloses the bandwidth control unit (1705) which enforce the bandwidth reservation, cancellation, change, the monitoring, etc. The bandwidth reservation procedure between the gateway device (102) and the counterpart device in the other zone is implemented on the basis of the RSVP procedure. Also see Fig. 1 Gateways located in different zones);

a second measuring appliance associated with a second network domain, coupled with the first network domain, which second measuring appliance executes a

second measuring process to collect the local measurements of a second local end-to-end data stream which traverses the second network domain (Fig. 8, element 1709, also for more explanation, column 12, lines 24-50, Iwama et al. disclose the communication control switch (1709) implements buffering and distribution of transmission/reception signals between the gateway device (102) and the Internet (1508) or the PSTN (1712), and serves to control the lines and the bandwidths which can be interpreted as measuring and collecting data from gateway and internet or PSTN which is considered local end-to-end); and

a third measuring appliance associated with a third network domain, coupled with the second network domain (Fig. 8, element 1710), which third measuring appliance executes a third measuring process to collect the local measurements of a third local end-to-end data stream which traverses the third network domain (Fig. 8, element 1710, column 12, lines 24-50, Iwama et al. disclose the voice processing device (1710) implements a function of converting speech packets transmitted/received in the Internet (1508) when a voice signal is transmitted/received with the PSTN (1712), whereby speech is transmitted/received between the Internet (1508) and the PSTN (1712), which can be interpreted as local end-to-end), wherein each first, second and third measuring process differs from other measuring processes being executed and includes one of (Fig. 8, element 1710):

a passive measuring process which collects information of each type of a data stream and of each packet of the data stream (Fig. 8, element 1710, Voice Processing Device is considered a passive device that implements a function of converting speech

packets transmitted/received in the Internet (1508) when a voice signal is transmitted/received with the PSTN (1712), whereby speech is transmitted/received between the Internet (1508) and the PSTN (1712)),

an active measuring process which collects information on a periodic basis, or  
a measuring process based on a measurement model generated in advance for a corresponding network domain.

**Regarding claim 29**, Iwama et al. teach a multi-domain management device (Fig. 1), which domains are coupled to one another and facilitate a passage for an overall end-to-end data streams, as a function of at least a corresponding measuring process of the measuring appliance and overall measurement specifications of the network (Fig. 1, from element 105-a to 105-b) but fail to teach a multi-domain management device comprising:

a monitoring module to generate and initiate a measurement configuration for measuring appliances executing various measuring processes and being associated with corresponding domains of a network;

configuration modules, each coupled to the measuring appliances executing an alike measuring process, to configure each measuring appliance based on the generated measurement configuration so that the configured measuring appliances deliver local measurements representing parameter values of corresponding local end-to-end data streams, which each traverses the associated network domain, based on the corresponding measuring processes; and



calculation means, coupled to the configuration modules, for determining data representative of parameters values of the overall end-to-end data streams based the delivered local measurements of the local end-to-end data streams. However, Gous et al. teach a multi-domain management device comprising:

a monitoring module to generate and initiate a measurement configuration for measuring appliances executing various measuring processes and being associated with corresponding domains of a network (Fig. 1, element 30 which perform the bandwidth allocation function;

configuration modules (Fig. 1, element 30 and elements inside it), each coupled to the measuring appliances executing an alike measuring process (Fig. 1, element 30 is coupled to the all the nodes), to configure each measuring appliance based on the generated measurement configuration so that the configured measuring appliances deliver local measurements representing parameter values of corresponding local end-to-end data streams (Fig. 1, based on bandwidth routing is done), which each traverses the associated network domain, based on the corresponding measuring processes (Fig. 1); and

calculation means, coupled to the configuration modules, for determining data representative of parameters values of the overall end-to-end data streams based the delivered local measurements of the local end-to-end data streams (Fig. 1, element 32 and also paragraph [0035], instruct the node to send data and receive confirmation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. to include elements

disclosed by Gous et al. in order to increase the quality of communication between two parties.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. (US Patent No. 6,600,735) in view of Gous et al. (US Patent Publication No. 2002/0194316) further in view of Maher et al. (US Patent No. 5,381,403).

**Regarding claim 23,** Iwama et al. in view of Gous et al. teach the device as in claim 1, but fail to explicitly teach the device further including:

a configuration interface of which includes:

interface modules, each dedicated to a corresponding specific measuring process, coupled to said monitoring means said measuring appliances, which execute the corresponding specific measuring process, and said calculation means, and arranged to configure the corresponding measuring appliance, collect the local measurements from each corresponding measuring appliance, and in order to supply the collected local measurements to said calculation means. However, Maher et al. teach the device further including:

a configuration interface (Fig. 1, element 102) of which includes:

interface modules (Fig. 1, elements 107, 108, and 109), each dedicated to a corresponding specific measuring process modules (Fig. 1, elements 107, 108, and 109 and coupled to different sites 103, 104, and 105), coupled to said monitoring means said measuring appliances (Fig. 1, elements 107, 108, and 109 and coupled to different

sites 103, 104, and 105), which execute the corresponding specific measuring process (Column 3, line 58- column 4, line 2), and said calculation means, and arranged to configure the corresponding measuring appliance, collect the local measurements from each corresponding measuring appliance, and in order to supply the collected local measurements to said calculation means (Fig. 1, and also, column 3, line 58- column 4, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Iwama et al. in view of Gous et al. to include the interface modules disclosed by Maher et al. in order to decrease the delay and improve the precision of the communication with less error.

**Regarding claim 24**, Iwama et al. in view of Gous et al. further in view of Maher et al. teach the device as in claim 23, wherein at least one of said interface modules includes:

an external measuring appliance for one of the coupled domains a domain of said communication network (Fig. 1 of Gous et al. also Fig. 1 of Maher et al. central controller).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. in view of Gous et al. further in view of Muirhead et al. (US Patent Publication No. 2003/0123446).

**Regarding claim 27**, Iwama et al. in view of Gous et al. teach the network as in claim 25, but fail to explicitly teach the network comprised of one of:

a transmission network including at least one of a WDM, a SONET or an SDH network type in particular,

a data network including at least one of an IP-Internet or an ATM, network, and

a speech network including at least one of a conventional, a mobile or a NGN network. However, Muirhead et al. teach the network comprised of one of:

a transmission network including at least one of a WDM, a SONET or an SDH network type in particular (Fig. 2),

a data network including at least one of an IP-Internet or an ATM, network (Fig. 2), and

a speech network including at least one of a conventional, a mobile or a NGN network (Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the network of Iwama et al. in view of Gous et al. to include different networks such as SDH, ATM and wireless network disclosed by Muirhead et al. in order to be able to serve different types of networks.

#### **(10) Response to Argument**

**Regarding claim 1**, Appellant argues, on pages 10, 11 and 12 of the applicant's Appeal Brief, that Gous does not teach or suggest "ordering constitution of a specific measurement configuration in each measuring appliance as a function of a corresponding measuring process of a respective measuring appliance and overall measurement specifications". Appellant further argues that Gous does not teach or

suggest "determining data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the configured measuring appliances". Appellant furthermore argues that either Gous , nor Iwama suggest execution of a measuring process to collect and deliver the local measurement of a local end-to-end data stream.

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

Gous et al. teach and disclose a method of generating a changeover sequence to reconfigure connections of a connection-oriented network from an existing configuration to a desired configuration (P[0009]). During the execution of the changeover sequence, the central controller steps through the changeover sequence. Specifically, the central controller may issue instructions to the nodes of the connection-oriented network for which routing and/or admission level changes are required in order to proceed from one network configuration to a next, possibly intermediate, configuration as defined by a next configuration specification within the changeover sequence of configuration specifications. The central controller does not issue instructions to the nodes of the network to instantiate the configuration specified by the next configuration specification until it has received acknowledgement from the nodes to which instructions were issued in order to instantiate a current configuration, specified by current configuration specification (P[0024]). The changeover sequence creation module 30, having constructed the changeover sequence data structure 34 as constituting a collection of routing/admission data structures 36, will calculate a

bandwidth (can be interpreted as a specific measurement configuration) allocation matrix for each routing/admission data structure 36 that is utilized in the changeover sequence generation process (P[0041])). The bandwidth allocation matrix 54 is utilized to represent the total bandwidth allocated to each element (e.g., node or link) of a connection-oriented network 12 and/or a particular routing/admission data structure 36. Specifically, the bandwidth allocation matrix 54 sums the bandwidths allocated in each network element used by each connection specified in the routing/admission data structure 36. The bandwidth allocated to any element by a particular connection is a zero if the route 44 utilized by the connection does not pass through the element. If a particular connection does pass through an element, the bandwidth deemed to be allocated to the element is equal to the maximum bandwidth admission level 46 attributed to the relevant connection (P[0042]). In other word, if the route passes an element the bandwidth allocated to the element is equal to the maximum bandwidth admission level. Having or not having the bandwidth, that can be interpreted as a specific measurement configuration, constitute a collection of routing/admission data structure that will calculate the bandwidth allocation matrix for each routing/admission data instruction as shown in figures 3 and 4.

As shown in figures 2-8 of Gous et al., the bandwidth allocation matrix and routing/admission data structure for each element, link and over all route have been presented. As it was explained above, bandwidth can be interpreted as a specific measurement configuration. Also, Gous et al. paragraph [0045] discloses a block diagram shown in Fig. 6 illustrating an instruction 62, according to an exemplary

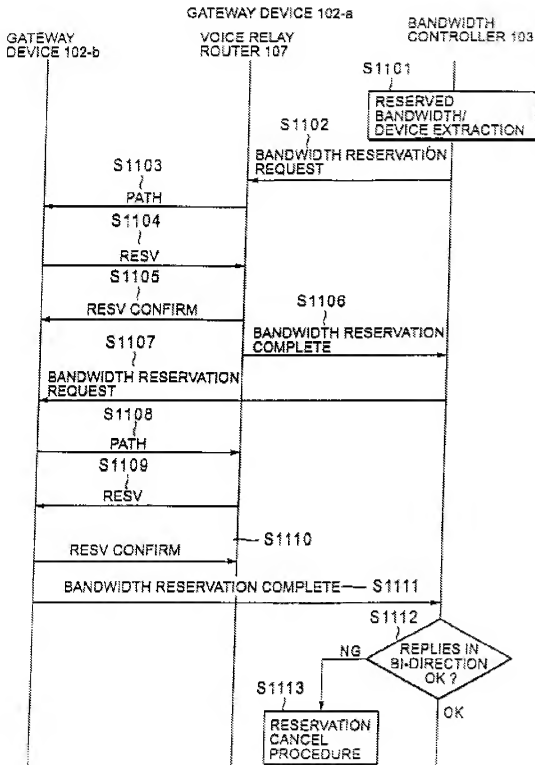
embodiment of the present invention that may be issued from a central controller, in the exemplary form of the changeover signaling module 32, to a node of the connection-oriented network 12. The instruction 62 is sent during execution of the changeover sequence to an individual node (e.g., a source node). The instruction 62 includes a source node label 64 and a payload comprised of connection identifiers 66, routes 68 and maximum bandwidth admission levels 70 corresponding to the relevant routes 68. The routes 68 may each include the information indicated in FIG. 2 as being included within the route 44, and comprise the new routes that the identified source node 64 must set up for the connection levels during the changeover period. The admission levels 70 are the new admission levels that the identified source node must establish during the changeover. Paragraph [0047] further discloses an instruction 62 is sent to all nodes on the old route and the new route at each configuration change according to the sequence of configuration specification. Further, in this case, an acknowledgement is required from each of the nodes on both the old and the new routes before proceeding to the next configuration change. Paragraph [0050] further discloses a block diagram of FIG. 7 illustrating an acknowledgement 72, which may be sent from each node responsive to successful execution of a received instruction 62. Specifically, the acknowledgement 72 is communicated by each node back to the changeover sequencing module 32 so as to allow the module 32 to determine when all instructions required to implement a specific configuration (e.g., an operational or an intermediate configuration) have been successfully executed. The acknowledgment 72 is shown to

include the source node label 64 and also a success field 74 which, if true, indicates that the execution of the changeover instruction 62 was successful.

Iwama et al. disclose and teach element 1705 (Bandwidth Control Unit) within node 102 which implements the bandwidth reservation, cancelation, alteration and monitoring. The bandwidth reservation procedure between the gateway device (102) and the counterpart device is implemented on the basis of the RSVP procedure which is further disclosed in Fig. 11 and Fig. 13.



FIG. 11



Appellant argues, on page 12 of the applicant's Appeal Brief, that "one skilled in the art would not have had teaching, suggestion or motivation to modify or combine Iwama et al. and Gous et al. to arrive at the subject matter of claim 1"..

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

As disclosed in Iwama et al, a communication bandwidth is managed by using a bandwidth controller, gateway devices and routers to monitor communication quality under bandwidth reservation. The gatekeepers and the gateway devices monitor the problems and problem restorations. Bandwidth reservation schedule table may be provided at least onto the bandwidth controller or the gate keeper having the function as a bandwidth controller. The bandwidth controller properly communicates with each gate keeper to ascertain prescribed data such as the data on the device status and the attribute, etc. On the basis of the device information thus obtained, the device status of the corresponding device is extracted from the device status management table of the gate keeper to judge the device status. If the judgment result indicates that the device status is out of the normal status, this processing is completed. On the other hand, if the device status is the normal status, the address information of the corresponding device is extracted from the attribute management table. Further more, Gous et al. teaches a method to reconfigure a connection-oriented network from an existing configuration to a desired configuration. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Iwama et al. to

incorporate the method of Gous et al. in order to increase quality and precision in the communication network.

**Regarding claim 2**, Appellant argues, on page 13 of the applicant's Appeal Brief that Iwama et al. does not teach or suggest "second data representing an arrangement of the respective associated domain" further more, Appellant argues, on page 3 of the applicant's Appeal Brief that Gous et al. does not teach or suggest "said monitoring means is arranged to order the constitution of the specific measurement configuration in each measuring appliance as a function of...".

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

As shown in Fig. 1 and claim 1 of Iwama et al. each of the gatekeepers registering in a device status managing table, status information of the gateway device and a voice relay router in the corresponding zone (or domain) as well as the status information of gateway devices and voice relay routers managed by other gate keepers in other zones. In other word, a device status and bandwidth in a domain is being monitored by another (a second) data that is in the device status managing table. Furthermore, Gous et al. disclose in paragraph [0024] during the execution of the changeover sequence, the central controller steps through the changeover sequence. Specifically, the central controller may issue instructions to the nodes of the connection-oriented network for which routing and/or admission level changes are required in order to proceed from one network configuration to a next, possibly intermediate, configuration as defined by a next configuration specification within the changeover

sequence of configuration specifications. Also, paragraph [0041] discloses the changeover sequence creation module 30, having constructed the changeover sequence data structure 34 as constituting a collection of routing/admission data structures 36, will calculate a bandwidth allocation matrix for each routing/admission data structure 36 that is utilized in the changeover sequence generation process.

**Regarding claim 8**, Appellant argues, on page 14 of the applicant's Appeal Brief that Iwama et al. does not teach or suggest "a measuring appliance which implements the measuring process based on a measurement model of a respective domain and local end-to-end data streams traversing the respective domain ". Also, the Appellant argues, on the same page that table 56 of Gous et al. double counted in claims 4, 5 and 8.

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

As shown in Fig. 1 of Iwama et al. , there is element 103 that is a bandwidth controller within network 110, provides bandwidth management for the nodes in the respective zones or domains through out the communication process.

As shown in Fig. 1 and Fig. 5 of Gous et al., element 56 is not only a data base of bandwidth allocations for the network elements but also, has to have a memory in order to maintain and keep the information.

**Regarding claim 16**, Appellant argues, on page 14 of the applicant's Appeal Brief that Gous et al. does not teach or suggest "an auxiliary calculation module to determine second data representing respective contributions of the coupled domains to

the first data, from the local measurements delivered by said configured measuring appliances and said local measurement specifications”.

In response to Appellant’s arguments, the Examiner respectfully disagrees with the arguments presented.

Fig. 2 of Gous et al. discloses sub-components of element 34 in Fig. 1 that introduces a changeover sequence data structure that is created by the changeover sequence creation module. The changeover sequence data structure 34 is composed of a sequence of configuration specifications in the form of routing/admission data structures 36. A first of the routing/admission data structures 36 describes the existing configuration 26, while a last of the routing/admission data structures (Auxiliary) describes the desired configuration 28. Intermediate routing/admission data structures 36 describe intermediate configurations for the connection-oriented network 12 so as to migrate the network 12 from the existing configuration 26 to the desired configuration 28.

**Regarding claim 28**, Appellant argues, on pages 15 and 16 of the applicant’s Appeal Brief that Iwama et al. does not teach or suggest that any of elements 1705, 1709, or 1710 executes its own measuring process to collect the local measurements of a local end-to-end data stream traversing a corresponding domain, as claimed. Also, fail to teach “ each measuring appliance performs its own different measuring process”, furthermore, fail to teach “each first, second and third measuring process differs from other measuring processes being executed and includes one of: a passive measuring process which collects information of each type of a data stream and of each packet of

the data stream, an active measuring process which collects information on a periodic basis, or a measuring process based on a measurement model generated in advance for a corresponding network domain".

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

As shown in Fig. 8 of Iwama et al. , each of the elements 1705, 1709 and 1710 perform their own processing within their own domain. The bandwidth control unit (1705) is application software which implements the bandwidth reservation, the reservation cancel, the reservation alteration, the monitoring, etc. The bandwidth reservation procedure between the gateway device (102) and the counterpart device is implemented on the basis of the RSVP procedure according to the procedure shown in FIG. 11. The communication control switch (1709) implements buffering and distribution of transmission/reception signals between the gateway device (102) and the Internet (1508) or the PSTN (1712), and serves to control the lines and the bandwidths, etc. . The voice processing device (1710) implements a function of converting speech packets transmitted/received in the Internet (1508) when a voice signal is transmitted/received with the PSTN (1712), whereby speech is transmitted/received between the Internet (1508) and the PSTN (1712) (Column 12 ,lines 24-50 and column 13 , lines 1-4). It is know by definition that a passive device is a device that depends on another device or element to perform a function. As shown in Fig. 8, a voice signal is needed for the voice processing device to effectively performs.

**Regarding claim 29**, Appellant argues, on page 17 of the applicant's Appeal Brief that Iwama et al. does not teach or suggest that modules 34, 54, and 56 disposed inside element 30 are not the same as or an equivalent of the modules which each is coupled to the measuring appliances executing an alike measuring process, from the appliances executing various measuring processes, as recited in claim 29.

In response to Appellant's arguments, the Examiner respectfully disagrees with the arguments presented.

Paragraph [0033] of Gous et al. discloses the changeover system 10 is also shown to include a configuration database 24 that stores an existing network configuration 26 and a desired configuration 28. The configurations 26 and 28 stored within the configuration database 24 may be received from one or more external configuration data sources 31. Paragraph [0034] discloses a changeover sequence creation module 30 is shown to be coupled to, and receive the existing configuration 26 and the desired configuration 28 from, the configuration database 24. The changeover sequence creation module 30 operates to generate a changeover sequence of configuration specifications (e.g., routing and bandwidth admission level configuration specifications) to migrate the network 12 from an existing configuration to a desired configuration. In one embodiment, the changeover sequence includes a sequence of intermediate configuration specifications, and ends with a configuration specification that conforms the network 12 to the desired configuration 28.

Also, element 30 of Fig. 1 of Gous et al. further comprising elements 34, 54 and 56. In paragraph [0036] and FIG. 2, a block diagram providing a view of a changeover

sequence data structure 34 (Monitoring module), according to an exemplary embodiment of the present invention, which may be generated by the changeover sequence creation module 30. Paragraph [0042] discloses the bandwidth allocation matrix 54 (a monitoring module) is utilized to represent the total bandwidth allocated to each element (e.g., node or link) of a connection-oriented network 12 and/or a particular routing/admission data structure 36. Specifically, the bandwidth allocation matrix 54 sums the bandwidths allocated in each network element used by each connection specified in the routing/admission data structure 36. Paragraph [0044] discloses the network element capacity table 56 indicates, for each element of the connection-oriented network 12, operational bandwidth capacity 58 and a reserved bandwidth capacity 60. In the exemplary embodiment, the operational bandwidth capacity 58 for each element is the maximum total bandwidth that may be allocated to a network element during an operational configuration.

The remaining rejected claims maintain their rejection due to above explanation.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



/NIMA MAHMOUDZADEH/

Examiner, Art Unit 2477

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